utilization, and left-turn treatment alternatives. It is important to note that some of these configurations may be considered unacceptable by some operating agencies from a traffic safety point of view. The safety aspect of signalized intersections cannot be ignored, and the provision in this chapter of a capacity and LOS analysis methodology for a specific operational configuration does not imply an endorsement of the suitability for application of such a configuration.

EXHIBIT 16-1. SIGNALIZED INTERSECTION METHODOLOGY Input Parameters - Geometric - Traffic - Signal Lane Grouping and Demand Saturation Flow Rate Flow Rate - Basic equation - Lane grouping - Adjustment factors - PHF - RTOR Capacity and v/c - Capacity - v/c Performance Measures Delay - Progression adjustment - LOS - Back of queue

## LOS

The average control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersection as a whole. LOS is directly related to the control delay value. The criteria are listed in Exhibit 16-2.

EXHIBIT 16-2. LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

LOS	Control Delay per Vehicle (s/veh)
A	≤ 10
В	> 10-20
C	> 20-35
D	> 35–55
E	> 55-80
F	> 80

LOS criteria

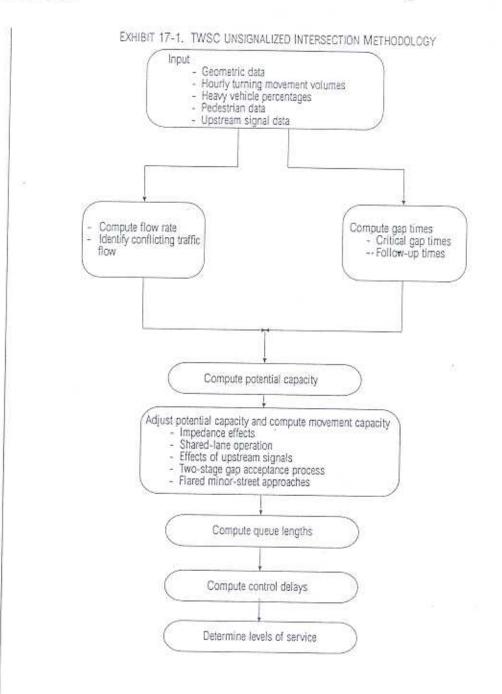


EXHIBIT 17-2. LEVEL-OF-SERVICE CRITERIA FOR TWSC INTERSECTIONS

Level of Service	Average Control Delay (s/veh)
A	0-10
В	> 10-15
C	> 1525
D	> 25–35
E	> 35-50
F	≥ 50